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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,335	04/05/2001	David E. Ewel	854.51US01	2979

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EXAMINER
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RODRIGUEZ, PAMELA

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/827,335	Applicant(s) EWEL, DAVID E.	
	Examiner Pam Rodriguez	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-21 and 23-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,12,19-21 and 27-40 is/are allowed.
- 6) ☒ Claim(s) 1,4-10,13-18,23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

1. The Amendment filed May 3, 2004 has been received and considered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10, 13-18, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Imoto et al. (US 4755008).

Regarding Claim 10, Imoto et al discloses an electronically enhanced brake valve for controlling a braking output to a vehicle having at least one wheel, the brake valve comprising: (a) a primary valve assembly 12 including a primary valve housing (see Figure 5), the primary valve housing defining a primary pressure chamber (i.e., the fluid chamber of the master cylinder 12) and a housing output (such as output 144) for communicating a braking output, the primary valve assembly 12 being configured to receive a manually controlled input (pedal pressure) that varies the braking output, the primary valve assembly including: a first spool valve (housed within the master cylinder) to vary the braking output according to the manually controlled input, and a secondary valve assembly 201 configured to receive input signals from a programmable electronic controller, the secondary valve assembly 201 including a second spool valve

221 configured to operate with the primary valve assembly 12, and an actuator (solenoid 242 and armature 245) configured to engage and actuate the second spool valve 221 according to the input signals received from the electronic controller such that the second spool valve 221 increases the braking output, the increased braking output being provided within the primary pressure chamber and communicated through the housing outport of the primary valve assembly 12 (see column 15 lines 15-16 and note: that brake application during acceleration, i.e., manual traction control in conjunction with automatic traction control causes brake pressure fluid increase from both the primary and secondary valve assemblies).

Re claims 13-18, see Figures 5 and 6 and the abstract.

Re claim 25, see col. 15 line 51.

Re claim 26, see solenoid 242 in Figure 6.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-9, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imoto et al (US 4755008).

Regarding Claim 1, Imoto et al. disclose a hydraulic brake system (see Figs. 5 and 6) for supplying a braking output (230) to a vehicle having at least one wheel, the

braking system including a primary valve assembly 12 configured to receive a manually controlled input 14 that varies the braking output, the primary valve assembly including a first spool valve (the spool valve is within the master cylinder 12) configured to vary the braking output according to the manually controlled input, and a secondary valve assembly 201, the secondary valve assembly being configured to receive input signals from a programmable electronic controller (ECU), the secondary valve assembly including a second spool valve 221 configured to be operated with the primary valve assembly, and an actuator (solenoid 242 and armature 245) for engaging and actuating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve assists the braking output produced by the primary valve assembly.

Imoto et al. fail to disclose the secondary valve assembly being integral with the primary valve assembly. In *In re Larson* the court found that use of a one piece construction instead of the structure disclosed in the prior art would be merely a matter of design choice, see MPEP 2144.04.V.8. Accordingly, it would have been obvious to one of ordinary skill in the art to which the invention pertains at the time the invention was made to have provided the secondary valve assembly integrally with the primary valve assembly as merely a matter of design choice.

Re claims 4-9, see Figs. 5 and 6 and the abstract.

Re claim 23, see above rejection re claim 1.

Re claim 24, see above rejection re claim 1, note that a valve body for making the primary and secondary valve assemblies integral would necessarily include first and

second fluid chambers defined by the primary and secondary valve assemblies, respectively.

***Allowable Subject Matter***

6. Claims 3, 12, 19-21, are 27-40 are allowed.

***Response to Arguments***

7. Applicant's arguments filed May 3, 2004 have been fully considered but they are not persuasive.

Regarding applicant's arguments with respect to Claim 10, the new examiner of the instant application (Exr. Rodriguez) contends that Imoto et al still teach applicant's newly amended claim language as outlined in the rejection of the claim above. In particular, as alluded to by the previous examiner (Exr. Pezzlo) in a previous office action, brake application during acceleration, i.e., manual traction control in conjunction with automatic traction control causes brake pressure fluid increase in both valve 12 (the primary valve of Imoto) and fluid increase in valve 201/221 (the secondary valve assembly). Therefore, applicant's new limitation of the increased braking output generated by the second spool valve would be felt in both the secondary valve assembly and within the housing of the primary valve assembly 12, where a primary pressure chamber would inherently be located.

Regarding applicant's arguments directed towards Claim 1, applicant argues that 1) making the master cylinder 12, valve 201, and summation device 202 of Imoto et al

into an integral unit to form a structure where the secondary valve assembly 201 is integral with the primary valve assembly 12 is not taught by Imoto and 2) the obviousness criteria of *In re Larson* used by the previous examiner is not met.

In response to these arguments, the new examiner (Rodriguez) concurs with applicant that Imoto alone does not teach integral primary and secondary valve assemblies. However, the logic applied by Exr. Pezzlo in invoking the *In re Larson* findings is still maintained to be valid. Since Imoto et al do teach a primary valve assembly 12 in conjunction with a secondary valve assembly 201, one of ordinary skill in the art when looking to design a hydraulic braking system would be apprised of the design and size constraints of the vehicle in which the valve assemblies would be housed. Thus, when one of ordinary skill in the art might certainly consider combining the two valve assemblies to limit the overall number of parts to the brake assembly and/or to consolidate like parts to one integral structure. Therefore, the new examiner maintains that the 103 rejection for Claim 1 is still on point.

Applicant's arguments regarding Claims 27-36 are moot as the examiner has now indicated these claims as containing allowable subject matter. And in an attempt to advance prosecution of the case, the examiner wishes to point out that none of the prior art references teach a system that provides first and second braking outputs/forces/operating ratios each at the same first brake pedal/input position nor first and second pedal feedback forces each at the same first brake pedal/input position. Therefore, if applicant were to incorporate this allowable subject matter into the text of

the remaining rejected claims, the outstanding rejections of Claims 1, 4-10,13-18, and 23-26 would be overcome.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 703-308-3657. The examiner can normally be reached on Mondays 6 am -4 pm and Tuesdays 6 am -12 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Pam Rodriguez  
Primary Examiner  
Art Unit 3683  
8/3/04

PR  
08/03/04